

CNAF provides real-time decision making for France's national housing assistance program with Couchbase

Industry

- [Government](#)

Customer application

- Social services application

Solution

- [IoT Data Management](#)
- [Customer 360](#)

Product

- [Couchbase Server](#)

Key features

- In-memory database



French essential operating service, **CNAF** (Caisse Nationale des Allocations Familiales) is the family branch of the French social security system that supports French families. The agency manages and distributes family allowance funds that are designed to reduce financial vulnerability and poverty for more than 33 million beneficiaries each year.

When CNAF needed to reduce its guaranteed response time to 24 hours, it turned to Couchbase's NoSQL solution to enable accurate real-time evaluations.

CHALLENGES

- Be able to conduct benefit and social services case evaluations instantly in order to provide responses within a 24-hour period
- Build an infrastructure that was capable of combining real-time data and historical data for case evaluations

OUTCOMES

- Couchbase NoSQL environment instantly merges historical data with new information for combined analysis
- Case workers are able to provide real-time decisions

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— XAVIER GAINON

Senior Database Manager, CNAF



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— **STÉPHANE DOLMETTA**
DSI, CNAF

The total welfare support provided by the CNAF represents an annual budget of approximately 95.5 billion euros. Over 38 million citizens log into its website monthly, and an additional 33 million use the mobile application. CNAF handles 1.5 million documents daily, shared with a large partner network of strategic importance (i.e., employers, caretakers, and any other public social services).

THE CHALLENGE: PROVIDE AN INSTANT EVALUATION FOR CASES USING REAL-TIME DATA

Since July 2019, the French legislature has made it mandatory to provide an answer for any benefit and social services case within a day of a citizen’s online query. CNAF needed to be able to evaluate any citizen’s right to government support in real time without the decision being based on past declarations of resources and revenues. To comply with the new law and deliver performance, the CNAF chose Couchbase to move to a new IT infrastructure in which simulation of cost and individual benefits could be calculated instantly.

THE SOLUTION: INSTANT COMMUNICATION AND REAL-TIME DECISION MAKING

All background information of French registered citizens is stored on a CNAF database, which is hosted on a CRISTAL data management system. The addition of Couchbase’s NoSQL environment now allows instant communication between historical data and any new input of information, enabling accurate real-time decision making. “Couchbase provides a solution no others do,” said Xavier Gainon, Senior Database Manager at CNAF. “It gives us the modularity we need with immediate operational simplicity, high performance, and room for scalability.”

The CNAF development team selected Couchbase because of Couchbase’s familiar and powerful SQL++ query language, its integrated platform capabilities like full-text search and indexing, and the professionalism of their commercial relationship.

“Couchbase supported us in rethinking the complete database infrastructure of CNAF, helping us optimize our calculation performance ‘as of today,’ and helping us work to provide the sufficient level of information required to make decisions,” said CNAF DSI, Stéphane Dolmetta. “At the end of the line, these things impact the everyday lives of citizens.”